

ABSTRACT OF THE DISCLOSURE

[0061]
[0062] We have discovered that the formation of particulate inclusions at the surface of an aluminum alloy article, which inclusions interfere with a smooth transition from the alloy surface to an overlying aluminum oxide protective film can be controlled by maintaining the content of mobile impurities within a specific range and controlling the particulate size and distribution of the mobile impurities and compounds thereof; by heat-treating the aluminum alloy at a temperature less than about 330 °C ; and by creating the aluminum oxide protective film by employing a particular electrolytic process. When these factors are taken into consideration, an improved aluminum oxide protective film is obtained.